

Notice of Allowability

Application No.

10/720,179

Examiner

Christopher R. Lamb

Applicant(s)

IDE ET AL.

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication of 29 December 2004.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 11/25/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stanley Fisher on July 6th, 2006.

The application has been amended as follows:

In claim 1, line 16, "no" has been replaced with "not".

2. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the closest prior art of record, Ueki et al. (JP 2000-231726) discloses a semiconductor integrated circuit (Fig. 1) comprising:

a time-constant variable bandpass filter which extracts a signal attributable to wobble from a signal outputted from a pickup circuit for scanning a surface of a recording medium formed with a track having in a surface thereof the wobble to thereby read a signal (Fig. 1: 8);

a digitizing circuit which digitizes a wobble signal having passed through the bandpass filter (Fig. 1: 6); and

a filter frequency control circuit which generates a control signal for controlling a frequency characteristic of the bandpass filter in accordance with the frequency of the wobble signal having passed through the bandpass filter (Fig. 1: 15), wherein the filter frequency control circuit includes,

a dummy filter identical in configuration to the bandpass filter (Fig. 1: 12),
a phase comparator which detects a difference in phase between a signal having passed through the dummy filter and a signal having not passed therethrough (Fig. 1: 13), and
a control signal generator which generates a frequency control signal for controlling an intermediate frequency of the bandpass filter according to the phase difference on the basis of a signal outputted from the phase comparator (Fig. 1: 15), and
wherein the intermediate frequency of the dummy is controlled in conjunction with the intermediate frequency of the bandpass filter on the basis of the frequency control signal (the output from the lowpass filter 14 goes to both the bandpass filter 8 and the dummy filter 12).

Ueki does not teach or suggest:

a lowpass filter for eliminating harmonic components of a signal outputted from the digitizing circuit (Ueki discloses a lowpass filter 14 but it is not connected to the digitizing circuit; in Ueki the filter frequency control circuit uses an analog rather than digital signal),

wherein the cutoff frequency of the lowpass filter is controlled in conjunction with the intermediate frequency of the bandpass filter on the basis of the frequency control signal.

These elements in combination with the other elements of the claim render it allowable over the prior art of record.

Regarding claims 2-6:

They are allowable due to their dependence on claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ueki et al. (JP 11-203681) is very similar to the prior art cited above; Ohta et al. (US 6,246,649) uses phase comparison to set bandpass frequency, as does Kobayashi et al. (US 7,057,985); Mashimo (US 6,987,719) uses two bandpass filters to set the center frequency; Mahr (US 2005/0073922) uses a lowpass filter as part of a frequency setting circuit.

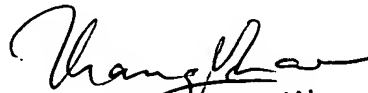
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (572) 272-5264. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 7/6/06


THANG V. TRAN
PRIMARY EXAMINER